## What is claimed is:

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- 1. A method for making a signal transmission tube, comprising disposing a reactive polymeric material within a confinement tube and leaving a portion of the tube interior unoccupied.
  - 2. The method of claim 1 wherein the interior of the confinement tube is substantially free of pulverulent reactive material.
- 3. The method of claim 1 wherein the reactive polymeric material comprises a GAP material.
  - 4. The method of claim 3 wherein the reactive polymeric material comprises a GAP resin that has been cross-linked with a multifunctional dipolar phile material.
  - 5. The method of claim 1, claim 3 or claim 4 comprising forming the confinement tube and disposing a layer of paint on the interior surface of the confinement tube, wherein the paint comprises the reactive polymeric material.
  - 6. The method of claim 1, claim 3 or claim 4 extruding the confinement tube over an elongate rod that comprises the reactive polymeric material.
  - 7. A signal transmission tube comprising a reactive polymeric material disposed within a confinement tube, wherein the reactive polymeric material is configured to leave a portion of the interior of the confinement tube unoccupied.
  - 8. The signal transmission tube of claim 7 wherein the interior of the confinement tube is substantially free of pulverulent reactive material.
- 9. The signal transmission tube of claim 8 wherein the reactive polymeric material comprises a GAP material.

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10. The signal transmission tube of claim 7 or claim 9 comprising a layer of paint on the interior surface of the confinement tube, the paint comprising the reactive polymeric material.

- 5 11. The signal transmission tube of claim 7 or claim 9 comprising a reactive polymeric material in the form of a rod disposed within the confinement tube.
  - 12. The signal transmission tube of claim 11 wherein the rod has a high surface area configuration.
  - 13. The signal transmission tube of claim 12 wherein the rod comprises a longitudinal bore therethrough.

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- 14. A method for making a signal transmission tube comprising extruding a reactivepolymeric material into a tubular form.
  - 15. The method of claim 14 further comprising extruding a sheath over the tubular reactive polymeric material.
- 20 16. The method of claim 15 wherein the sheath is configured to be fractured by the reaction of the reactive polymeric material.
  - 17. The method of claim 15 wherein the sheath is configured to be consumed by the reaction of the reactive polymeric material.
  - 18. The method of any one of claims 14-16 wherein the reactive polymeric material comprises a GAP material.
- 19. A signal transmission tube comprising a reactive polymeric material in the form of30 a tube.
  - 20. The signal transmission tube of claim 19 wherein the interior the tube is substantially free of pulverulent reactive material.

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- 21. The signal transmission tube of claim 20 further comprising a sheath disposed over the reactive polymeric material.
- 22. The signal transmission tube of claim 21 wherein the sheath is configured to be fractured by the reaction of the reactive polymeric material.
  - 23. The signal transmission tube of claim 21 wherein the sheath is configured to be consumed by the reaction of the reactive polymeric material.
- 24. The signal transmission tube of claim 19 wherein the reactive polymeric material comprises a GAP material.
  - 25. The signal transmission tube of claim 24 comprising a GAP resin that has been cross-linked by a multifunctional dipolarophile material.